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# Pancreatic Polypeptide (h): 293T Lysate: sc-159782

## BACKGROUND

Pancreatic Polypeptide (PP) and Pancreatic Icosapeptide (PI) are both deduced from the pancreatic prohormone precursor. The two peptide sequences are separated by a Gly-Lys-Arg cleavage and amidation site. The Pancreatic Polypeptide lies on the N-terminal side of this cleavage site while the Pancreatic Icosapeptide lies on the C-terminal side. The prohormone precursor is produced by the endocrine F cells of the pancreatic islets and, in response to food intake, the Pancreatic Polypeptide is released into the circulation. The Pancreatic Polypeptide is a member of the neuropeptide Y (NPY) family of hormones that bind to Y receptors. In particular, it binds to Y4 receptors and functions as an anorexigenic hormone. Subjects with Prader-Willi syndrome have a decreased Pancreatic Polypeptide response to a meal. Administration of Pancreatic Polypeptide decreases food intake and may serve as a therapeutic option for treatment of obesity.

## REFERENCES

- Boel, E., Schwartz, T.W., Norris, K.E. and Fiil, N.P. 1984. A cDNA encoding a small common precursor for human pancreatic polypeptide and pancreatic icosapeptide. *EMBO J.* 3: 909-912.
- Schwartz, T.W., Hansen, H.F., Hakanson, R., Sundler, F. and Tager, H.S. 1984. Human Pancreatic Icosapeptide: isolation, sequence, and immunocytochemical localization of the COOH-terminal fragment of the Pancreatic Polypeptide precursor. *Proc. Natl. Acad. Sci. USA* 81: 708-712.
- Leiter, A.B., Montminy, M.R., Jamieson, E. and Goodman, R.H. 1985. Exons of the human Pancreatic Polypeptide gene define functional domains of the precursor. *J. Biol. Chem.* 260: 13013-13017.
- Takeuchi, T., Gumucio, D.L., Yamada, T., Meisler, M.H., Minth, C.D., Dixon, J.E., Eddy, R.E. and Shows, T.B. 1986. Genes encoding Pancreatic Polypeptide and neuropeptide Y are on human chromosomes 17 and 7. *J. Clin. Invest.* 77: 1038-1041.
- Koska, J., DelParigi, A., de Courten, B., Weyer, C. and Tataranni, P.A. 2004. Pancreatic Polypeptide is involved in the regulation of body weight in Pima Indian male subjects. *Diabetes* 53: 3091-3096.
- Schmidt, P.T., Näslund, E., Grybäck, P., Jacobsson, H., Holst, J.J., Hilsted, L. and Hellström, P.M. 2005. A role for Pancreatic Polypeptide in the regulation of gastric emptying and short-term metabolic control. *J. Clin. Endocrinol. Metab.* 90: 5241-5246.
- Ku, S.K., Lee, H.S. and Lee, J.H. 2006. The regional distribution and relative frequency of gastrointestinal endocrine cells in the nude mice, Balb/c-nu/nu: an immunohistochemical study. *Anat. Histol. Embryol.* 35: 104-110.
- Kapran, Y., Bauersfeld, J., Anlauf, M., Sipos, B. and Klöppel, G. 2006. Multihormonality and entrapment of islets in pancreatic endocrine tumors. *Virchows Arch.* 448: 394-398.
- Yamada, S., Terada, K., Ueno, Y., Sugiyama, T., Seno, M. and Kojima, I. 2006. Differentiation of adult hepatic stem-like cells into pancreatic endocrine cells. *Cell Transplant* 14: 647-653.

## CHROMOSOMAL LOCATION

Genetic locus: PPY (human) mapping to 17q21.31.

## PRODUCT

Pancreatic Polypeptide (h): 293T Lysate represents a lysate of human Pancreatic Polypeptide transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

Pancreatic Polypeptide (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Pancreatic Polypeptide antibodies. Recommended use: 10-20 µl per lane.

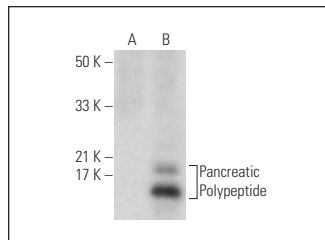
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Pancreatic Polypeptide (B-2): sc-514155 is recommended as a positive control antibody for Western Blot analysis of enhanced human Pancreatic Polypeptide expression in Pancreatic Polypeptide transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

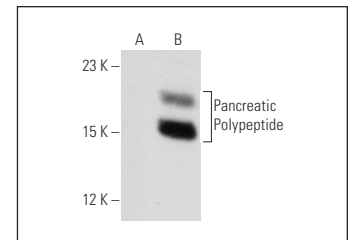
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



Pancreatic Polypeptide (B-2): sc-514155. Western blot analysis of Pancreatic Polypeptide expression in non-transfected: sc-117752 (A) and human Pancreatic Polypeptide transfected: sc-159782 (B) 293T whole cell lysates.



Pancreatic Polypeptide (030-06-1): sc-80494. Western blot analysis of Pancreatic Polypeptide expression in non-transfected: sc-117752 (A) and human Pancreatic Polypeptide transfected: sc-159782 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.